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ABSTRACT

This paper reports on a project involving student recall of the dialogue in a movie and retention of the "anchor," which in this case refers to a videotape recording of "To Kill a Mockingbird." The project looked at how students retained knowledge over a few days and what kind of activities resulted from expertise with an anchor. The goal of anchored instruction is to help students see knowledge not as facts to memorize, but as a tool for problem solving. In this project, 12 boys in an 8th grade, resource room social studies class watched scenes from the video over a period of 5 days and debated the outcome of the trial and several of the main characters for 2 weeks. Findings revealed that students remembered dialogue, primarily dramatic dialogue, from the movie almost verbatim, and they seemed to develop personal ownership of certain lines. Results suggest that some stories are told more through dialogue than through action, that the content of a video presentation includes both oral language devices that encourage subjective knowing and written language, and that there is a social dynamic involved in becoming expert in an anchor. (Contains 27 references.) (NAV)

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Memory for Dialogue:
Recalling an Anchor through Talk and Response

by Pam Beaver

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Twelve students, all boys, are watching a scene from "To Kill a Mockingbird" where a group of farmers pull up to the small town jail late at night, intending to lynch the black man inside accused of raping a white woman. The eighth graders in this social studies class watch intently as the black man's lawyer, Atticus Finch, attempts to send the crowd back home. Most of the students read several years below grade level; some can barely read. But this group is very verbal if classroom debates are an indication. Today, they are watching approximately 8 minutes of the movie, deciding how to divide the movie's actions into smaller segments, and giving each segment a name for later reference.

It has been slow going all period. It's Monday; students did this activity for two days last week with other parts of the movie; they're impatient with having to talk through where an idea starts and stops. Their teacher is working hard to keep them on task. Near the end of the period, one of the boys calls out, "They said, 'I'm not going,'" referring to something Atticus's children said. A couple of minutes later, the same boy calls out, "Cause Tom say, 'They gone?' and he say, 'yeah,'" referring to the closing dialogue at the jail between Atticus and his client, Tom Robinson, after the mob has left. Another student calls out a line from this same exchange: "They won't bother you." The teacher comments that the group is remembering the dialogue almost verbatim.

Students in this resource room social studies class are using anchored instruction to work on the theme of fairness and justice, tracing attitudes from the Depression era to the present. They have watched approximately 40 minutes of selected scenes from "To Kill a Mockingbird" dealing with the arrest and trial of Tom Robinson, a black man accused of raping May Ella Ewell, a white woman. Over the next two days, as students continue segmenting the trial scenes, this kind of spontaneous calling out of bits of dialogue from the movie will continue to happen. Students have already spent two days watching the 40 minutes of video; they will devote five days to segmenting the video scenes into smaller pieces and approximately two more weeks debating the outcome of the trial and developing presentations on several of the main characters. As they become expert in this anchor, students will notice things about the setting of the movie, the actions of the characters, and what the characters say. At almost every class session, someone will use lines from the movie to make a point or to illustrate a scene or character. What purpose does this calling out and imitating certain lines from the movie

have for the students? Is it a way to reference a particular scene? Or to form an impression of a certain character? Or is it a diversion, a way to stay attentive, to be noticed by others?

The project reported in this paper was designed to explore a possible link between students' recall of dialogue from "To Kill a Mockingbird" and their retention of the anchor. Specifically, we sought to address two questions: first, do students retain knowledge of the anchor video for more than a few days after they watch it; and second, what kinds of activities result in expertise with an anchor.

Some Assumptions of Anchored Instruction

The goal of anchored instruction is to help students see knowledge as a tool to solving problems, rather than facts to be memorized. It is an attempt to help students think like experts. Students are given opportunities to actively use new knowledge in ways that help them experience changes in their noticing and thinking and eventually on their performance in achieving specific goals. "By seeing how new knowledge effects their own perceptions and comprehension, students experience it as a tool for guiding thinking rather than as mere facts to be learned," write Bransford and Vye (Bransford & Vye, 1989, p. 197-198).

Students can experience such changes in thinking with activities like taking the perspectives of different characters in a video or making comparisons and contrasts across settings, events, or characters. Anchored-instruction requires students to develop shared expertise around an anchor, which is accomplished in part by revisiting the anchor frequently to pull out meaningful units of information (McLarty et al., 1990). Usually, a video is used as the anchor because the information presented in a video format is rich in detail, yet accessible to students regardless of background knowledge. Also, students are willing to revisit video scenes repeatedly, digging for new perspectives or information, with the whole class participating.

To develop a shared expertise of a video anchor, students work with information presented visually and orally. Students notice visual details--for example, when May Ella doesn't put her hand solidly on the Bible before testifying. They also notice oral details such as intonation. Shared expertise is created principally through an activity called "segmenting," in which students watch a 4- to 10-minute segment of video and break it into smaller chunks. Students then name each chunk.

Effectively, students disassemble the original video into units they define as meaningful and then reassemble the story line with labels they've created through classroom discussion, which is often lively and competitive. Segmenting is a very public process of taking a salient feature of the video, giving it a label, calling it out to the whole group, and then voting as a group on which name will serve as the reference for that scene in the future. Sometimes in this class discussion, a student will offer a piece of dialogue from the video and wait to see if other students will pick up on it.

What's Going on Here?

Several things were interesting about what students were doing with the dialogue in "To Kill a Mockingbird." First, remembering the dialogue was incidental to the intended learning process and yet it was remembered almost verbatim. Second, some of the dialogue that students called out was humorous, had more dramatic intonation or came during a crucial point in the trial: was there something within the dramatized "text" that encouraged focus on particular dialogue? Third, students seemed to develop a kind of proprietary ownership of certain lines, which they encouraged other students to recognize and which they used to illustrate points within class discussions. This calling out behavior that occurred occasionally but consistently in class discussions of "To Kill a Mockingbird" involved several seemingly unrelated areas of research--text/media attributes such as saliency and intonation, reader/listener qualities, and the interplay of episodic and semantic memory. One common thread that might possibly run through all was the notion of importance.

Dialogue in a film is more like oral language than written language. Horowitz and Samuels describe oral language as being episodic and narrative-like, with prosodic cues such as intonation and paralinguistic devices like facial expressions helping to establish coherence. Oral language is primarily designed to express feelings or interpret relationships and doesn't rely on word use to convey meaning because nonverbal cues and voice convey considerable information that evokes meanings. In written language, by contrast, cohesion is held through explicit words, signal words, anaphoric relations (references to previous parts of the text), and punctuation (Horowitz & Samuels, 1987).

Still other researchers argue that the distinction is not between oral and written language as systems but between type of content conveyed. Gillian Brown notes that while oral language is primarily

listener-oriented, interpersonal speech, there are types of oral language which are message-oriented, and Deborah Tannen suggests that the dividing line between oral and written language is involvement: conversation encourages personal involvement; exposition emphasizes detachment (Horowitz & Samuels, 1987; Tannen, 1982).

A classic study of incidental memory for oral language was done by Keenan, MacWhinney and Mayhew (1977). A seminar discussion was tape recorded and several days later students were presented verbatim and paraphrased written texts of what was said. Students who had attended the seminar could discriminate the verbatim from paraphrased text when the verbatim was phrased in a witty way or had some other communicative importance. Students who were members of the class but had not attended on the day of the recorded seminar had only a chance recognition of verbatim versus paraphrased sentences. Rayner and Pollatsek suggest, "The Keenan, MacWhinney, and Mayhew experiment indicates that there are certain aspects of communication, such as tone, and certain richness of detail (if 'important' in some intuitive sense) that are not easily represented in a propositional network such as Kintsch and van Dijk." (Rayner & Pollatsek, 1989, p. 302). The Keenan et al study indicates that we remember details as well as the gist of a spoken statement when the details have some significance in the context where they were used.

What then is it about the details that makes them stand out and do all listeners notice the same lines? A study by Winograd (1984) comparing good and poor 8th grade readers indicates that poor readers are more likely to rate sentences as important based on contextual factors such as information they are personally interested in or texts that have lots of visual detail. Good readers take more cues from the text to determine what's important. "Fluent readers are able to make use of both textual and contextual criteria," writes Winograd, "so that importance is assigned to elements that are personally relevant *and* to elements the author intended to be relevant." (Winograd, 1984, p. 406). Winograd suggests that textual cues and the reader's background knowledge combine to help the reader identify what's important in a text, and he recommends asking students what they consider important and why.

Brandt would agree that writers create textual cues as to what is important--"explicit instructions for how to take and what to do with a message." (Brandt, 1990, p. 62) But she would argue that poor readers lack a more general orientation to a reader-writer involvement--a sense of

"we" developing a shared understanding. In other words, poor readers decide what's important to them with little concern for how their take of the text fits with the intentions of the writer.

It seems reasonable that importance for some readers/listeners is determined by a degree of involvement and response to the presentation. If this is possible with text, is it also true for speech? Horowitz and Samuels suggest that researchers are just beginning to question how sound influences the construction of meaning: "At what level of language processing--orality or literacy--is sound a necessary ingredient?" they write, ". . .how does sound influence syntactic, paragraph-level and even macrostructure processing and the meaning of a text that emerges line by line across stretches of ideas? This is barely touched." (Horowitz & Samuels, 1987, p. 21). So it isn't clear what makes some dialogue more salient than other lines, but voice and other prosodic cues could play a role.

The Text: Interaction of Media, Importance and Involvement

Anderson and Pearson cite several studies indicating that recall of important text elements may be a memory process rather than a learning process and caution that what makes a text element "important" will vary. For example, the Goetz et al (1983) study involving a text about two boys playing hooky from school found that the reader's perspective strongly influenced what information was recalled; Cirilo and Foss (1980) took sentences, varied their "importance" in different stories, and found that readers spent more time on sentences that had high importance to a story (Anderson & Pearson, 1984). Anderson and Pearson write: "It is apparent that one ought to be cautious in assuming that every operation that can be said to make a segment of text salient, interesting, or important will affect processing in the same manner." (Anderson & Pearson, 1984, p. 276)

Anderson and Pearson suggest that the focus of analysis should be on what readers are doing with the extra attention they're investing: are they just rehearsing segments of text or are they processing segments at a semantically deeper level? They argue that the extra attention is used to connect individual propositions with an overall situation model the reader is constructing on-line. That may be true for good readers, but are poor readers using obviously rehearsed lines from "To Kill a Mockingbird" to create an overall representation of the plot or a particular character?

What is important in a text and what users of the text do when

attending to it may depend partly on the medium of the text as well. Salomon found in one study with 6th graders that poor readers performed somewhat better on recall and inferencing tasks when viewing a TV story than when reading a story, which he attributed to preconceptions students have about how much mental effort to expend on each media (Salomon & Tamar, 1984). Other researchers have noted that visual images in a video medium can help beginning or poor readers develop better mental models to aid in comprehension. Sharp et al (pre-publication copy) write: "In order for videos to support mental model building, they need to provide visual details about the setting, character actions, and changes in spatial relationships as the characters progress through the story." (Sharp et al., pre-publication copy, p. 9)

Students were usually attentive when watching "To Kill a Mockingbird" and did notice a number of details from the video, but the video segments we showed the class relied on dialogue perhaps even more than actions and settings to tell the story of the rape trial. Lakoff and Tannen did a study once which showed that readers often find written dialogue in drama more real than transcripts of spoken conversations (Tannen, 1982). It's possible that the benefits of the videodisc medium in helping viewers notice visual details are equally available for viewers to notice oral language in a way that is not practical in ordinary conversation, classroom discussions or oral reading.

Meringoff's study comparing what children ages 6-8 and 9-10 remembered from an African folktale presented in two conditions indicates that each media has features supporting certain kinds of processing and that the sounds of speech are one thing children attend to (Meringoff, 1980). Meringoff found that children who watched a video of "A Story, A Story" remembered more story actions and relied more on visual content to make inferences; children who read the story in an illustrated text recalled more story vocabulary, based inferences more on text content, general knowledge and personal experience. An interesting point about this study is that the illustrated text was read to the students by the researcher; it was essentially a listening condition combined with reading and viewing illustrations. Meringoff notes that subjects in the listening condition remembered repetitive figurative language, suggesting that text functions to convey more than just information. She writes, ". . .a story's use of language needs to be closely studied, for words may work as sounds as well as symbols with referential meaning." (Meringoff, 1980, p. 247)

Brown in a follow-up study of Meringoff's original work notes that students in the "A Story, A Story" study also spontaneously mimicked what they saw characters do and based more inferences on what characters looked like and how they behaved (Brown, 1988). Brown's study looked more closely at the role of sound effects and music on what students recalled and inferred from a story. In this study, 4th and 6th graders listened to one of two audiotapes of "Treasure Island" episodes: one version was simply a verbal narration, the other used the same verbal narration plus sound effects and music. Brown noticed that students used sounds from the elaborated stories in their retelling and in giving evidence to questions about story events. The study suggests that audio formats enriched with sound effects seem to ". . .facilitate children's listening to language whose sound is as important as its meaning, as well as to sound effects and music." (Brown, 1988, p. 43)

The distinction between sound (or affect) and meaning (or message) is an interesting one to explore, particularly when a "text" is communicated verbally. Olson offers a traditional view of literacy when he writes that written text split the comprehension process into two parts: the part preserved by the text ("the given") and the part provided by the reader ("the interpretation") (Olson, 1986, p. 113). Tannen would argue that there are two kinds of interpretation--subjective knowing and objective knowing (Tannen, 1982). In formal writing or "autonomous language" (p. 18), the focus is on the content and personal involvement is deemphasized: "Ideally, the audience is expected to suspend emotional responses, processing the discourse analytically and objectively." (Tannen, 1982, p. 18) This would be objective knowing/interpretation.

Tannen argues that Olson's "the given" is a surface feature of linguistic structure, while involvement operates at a deeper level, reflecting what Goffman (1979) calls "footing" (p. 2) which is the ". . .speaker's stance toward the audience" (Tannen, 1982, p. 2). In imaginative literature, authors often combine features of spoken discourse with those of formal writing in order to use involvement to create subjective knowing. Tannen maintains that involvement grows out of a sense of identification that is established between an audience and the characters of a story. She notes that such a dynamic is common in oral language: ". . .the nature of storytelling in conversation is based on audience participation in inferred meaning. . . .the effect of conversation is subjective knowing created by audience involvement (i.e. by being MOVED), as opposed to objective knowing, created by intellectual argument (i.e. by being CONVINCED)." (Tannen, 1982, p. 4) Oral language and

written language both use linguistic patterns such as parallelism, repetition, detail, figures of speech and constructed dialogue to create interpersonal involvement (Tannen, 1982; Tannen, 1987). Brandt argues that message and involvement cannot be separated into two sides of a seesaw. Rather, message begins with and is the embodiment of an involvement between reader and writer that requires a commitment to an exchange (Brandt, 1990).

The Reader: Comparison of Good and Poor, Bottom Up and Top Down

A number of studies have compared good and poor readers in reading and listening conditions. Students participating in the "To Kill a Mockingbird" project are poor readers. We wondered if their memory for dialogue might be explained by reading research on how poor readers attend to and use detail. Reading ability is a continuum, and no single factor is able to explain all of the differences between good and poor readers (Singer, 1982). Nonetheless, research on poor readers does seem to split into two possible major factors to explain reading difficulties: decoding problems (a bottom-up factor) and inefficient use of context (a top-down factor). Anderson and Pearson cite a study by Bransford et al (1982) in noting that poor readers typically don't routinely and spontaneously make the inferences needed to connect information given in a text with a coherent overall representation in memory, which is a top-down explanation (Anderson & Pearson, 1984). Samuels argues that poor readers are unable to get to the level of inference-making because of decoding problems (Samuels, 1987). In a study he and Horowitz did with 6th grade good and poor readers comparing listening and reading comprehension skills, Samuels found that good readers (9th grade level) and poor readers (4th grade level) showed no difference in their recall of difficult and easy texts in the listening condition, but the poor readers showed significant differences on the reading condition, even when the text was written at a 4th grade reading level. Samuels concludes: "It appears, then, that the difference between good and poor readers, at least with this sample, is with decoding skill rather than with listening comprehension." (Samuels, 1987, p. 315)

McNamara et al (1991) suggest that the top-down strategy of using context is misapplied by poor readers (McNamara, Miller & Bransford, 1991). They argue that efficient, skilled reading relies on using the context to constrain what gets added to one's mental model during

reading: "Poor readers might have unintentionally allocated processing resources to the specification of irrelevant properties, thereby reducing resources needed for other reading processes." (McNamara et al., 1991, p. 503)

Daneman suggests that the allocation of processing resources is critical to comprehension, noting that both working memory capacity constraints and the use of background knowledge may explain why poor readers have difficulty integrating new information with information stored in semantic memory (Daneman, 1991). Poor readers may have small working memory capacities making them ". . .more prone to losing the verbatim wording at sentence boundaries," (p. 529) which leaves poor readers less able to recover when they encounter an inconsistency in what they're reading. Poor readers may also be too "top down," failing to incorporate new information into a schema they've already selected.

Townsend, Carrithers and Bever (1987) look at the issue from an integrated perspective (Townsend, 1987). They note that good readers use their schema expectations for thematic integration and that they use morphemic cues from the text to signal how to integrate various propositions. Poor readers tend to rely more on their schema and less on word cues for proposition integration. They note that average middle school readers can respond to thematic cues but have relatively greater difficulty than skilled readers in identifying those cues and processing them into propositions. Townsend et al recommend that average readers need to be made more aware of phrase structuring of words and sentences as units of meaning: "Attention to the intonation patterns of spoken language, practice in reading phrases rather than individual words, listening to skilled readers imposing intonation on printed language would all be helpful in increasing proposition perception processes. . . ." (Townsend, 1987, p. 237)

The Mind: Would the Memory Supporting Comprehension Please Stand Up?

Tracing the thread of "importance" as one possible explanation for why students would recall "To Kill a Mockingbird" dialogue seconds, days or weeks after hearing it, we come to the most theoretical part of this consideration: where in memory does some piece of dialogue, determined important by some quality of how it was presented or by some response from the reader/listener, get stored? Memory for detail such as verbatim dialogue or gist that is very close to being word for word would probably

be considered episodic memory. But episodic memory is typically described as more short-term and unstable, seldom used in the reading process unless as some kind of mnemonic (Samuels & Kamil, 1984).

The classic study comparing recognition memory for surface details versus meaning (propositions) was done by Sachs (1974). Subjects listened to passages and were interrupted periodically for a recognition test to distinguish original wording from reordered wording. For example, the original statement might have been "He sent a letter about it to Galileo, the great Italian scientist," and the reordered wording would read: "He sent Galileo, the great Italian scientist, a letter about it." (Rayner & Pollatsek, 1989, p. 299) The major finding of Sachs's study was that even with just a one-minute delay from hearing the sentence, subjects would confuse the reworded statement with the original wording. However, if the reworded sentences also changed the meaning of the statement, subjects were able to recognize the change about 90% of the time. Sachs (1974) concluded that surface details are not usually remembered.

Researchers vary in how they define episodic memory and semantic memory in relation to one another. Klatsky suggests that they differ in their susceptibility to forgetting: episodic memory is in a constant state of change as new information comes in, is transformed and made irretrievable; semantic memory probably changes less often (Klatsky, 1980). By comparison, van Dijk defines episodic memory as ". . .a component of long term memory where people store particular information about each event or action--including verbal acts such as discourses--they have processed in short term memory." (van Dijk, 1987, p. 161)

There are phenomena in memory research that suggest some kind of relationship between episodic memory for detail and semantic memory for meaning exists. Two such phenomena are memory for incidental details and recognition/recall differences when contextual cues are used. Klatsky notes that studies have shown people are capable of remembering such incidental details as the shapes of U.S. states and what typeface is used in a written text. Contextual conditions are part of the encoding process and can act as effective retrieval cues (Woodall & Folger, 1981). Woodall and Folger researched whether or not nonverbal cues such as hand gestures (semantically related and unrelated) can also help cue recall for phrases; they found that ". . .speech primacy movements, gestures rhythmically linked to speech that emphasize but have no semantic meaning, can produce utterance retrieval." (Woodall & Folger, 1981, p. 48). van Dijk notes that when people participate in understanding oral language ". . .the

rich information from. . .intonation, gestures, paraverbal acts. . .leads to a possibly more differentiated context model, and hence to better recall of the communicative situation itself." (van Dijk, 1987, p. 183)

The Study: Three Tests of Verbatim Recall for Dialogue

During our first year, we noticed that students were spontaneously calling out dialogue from "To Kill a Mockingbird" and using it to reinforce class discussions or presentations. We wondered if the phenomenon was simply part of the experience of watching the video or if it had longer-lasting consequences. If students were paying close attention to dialogue there might be implications for 1) the type of video used in reinforcing literacy skills and 2) how to use dialogue from the video to teach characterization, plot or argumentation. We decided to check to see how much dialogue students from Year 1 remembered after a delay of 6-8 weeks and if there were any patterns to what they remembered. We gave the same recall test to students in segmenting and non-segmenting conditions in Year 2.

As an initial check for which students were calling out dialogue, how often and at what points in the movie, we viewed our classroom videotape from the days when students were segmenting "To Kill a Mockingbird." Most of the imitative behavior occurred on the third day, with students calling out or imitating dialogue five times, more than any day, which may have had something to do with the nature of the testimony being viewed (May Ella and Tom Robinson). We then chose examples of dialogue from both major and minor characters at key and incidental moments in the video to use in testing student recall.

We conducted the actual recall test with the whole class. Before beginning with questions about dialogue, we asked students how well they thought they remembered "To Kill a Mockingbird." Most said they could remember parts of it. The storyboard representing all of the scenes that the students had segmented and named were still posted above the blackboard, and students often referred to those. Students in the non-segmenting condition did not have such cues.

We organized the protocol to test for recall in three ways. First, we read a list of the characters from most prominent to least prominent and asked students to tell anything they could remember that character saying anywhere in the movie, even if they couldn't remember what the character said word for word. This condition was essentially free recall, and we didn't expect students to remember much after so many weeks.

Second, we showed nine brief clips of the video without any sound and asked students to identify what the character was saying. The third condition was the one we expected to be the easiest for the students: we played brief pieces of the dialogue without the video and asked students if they could identify who said the piece and in what scene.

The Findings:

Free Recall Condition:

Year 1: Students were able to remember something that each of five main characters (Atticus, Scout, Mr. Ewell, May Ella, Tom Robinson) and five minor characters (Sheriff, Mr. Cunningham, Jim, Deal, the Judge) said in the movie. Memory for dialogue was both in proposition and verbatim form. For example, students remembered propositions like Atticus telling Tom Robinson after the guilty verdict not to lose hope; they remembered Scout saying that she wasn't going back to school; May Ella saying that Tom Robinson raped her; and Deal saying that his father was an airplane pilot. But what was more surprising was how much of the dialogue they remembered word for word, partially or completely. Some of the remembered dialogue was short, such as "Move along, Jim" (Atticus); "entailments are bad" (Scout); "nigger lover" (Mr. Ewell); "bust up this chifferobe" (May Ella); "Come here, Tom" (Tom Robinson); "She was mighty beat up" (Sheriff); "Come on, boys" (Mr. Cunningham); "I ain't leaving" (Jim); "Everybody stand" (the Judge). But other pieces were longer, such as "What in the sam hills are you doing!" (Scout); "I ran to the fence and I ran around back and I ran. . . ." (Mr. Ewell); "I got one thing to say and I ain't gonna say no more" (May Ella); "And he hit me and he hit me and he hit me." (May Ella); "That was the only thing disturbed in the room" (Tom Robinson); "I tell Walter you say hey" (Mr. Cunningham); "I'm five years old and I can read" (Deal); "This is a nice night out tonight isn't it" (Judge). Most of what students remembered was in actual or near word for word order to what the characters said. Also interesting was the pattern of student participation: five students participated a lot; five students were attentive but not calling out as much; and three students were not involved at all.

Year 2: The students who were in the segmenting condition were able to remember some of the dialogue word for word. For example, most students could remember Scout saying, "What in the sam hell are you doing?"; two of the girls remembered Mr. Ewell saying, "That man raped my May Ella"; and everyone enjoyed imitating May Ella's tearful outburst,

"I got something to say and I ain't gonna say no more". As for the minor characters, the segmenting group could remember that Mr. Cunningham had said "I brought you some hickory nuts" and that the sheriff said of Tom Robinson before he was shot that "he ran like a wild man." One student remembered that Jim said "he won't come down until he (Atticus) play football for the major leagues." Actually, it was the Methodists that Jim wanted his dad to play football for, but this was close. Overall, however, students who segmented the anchor in Year 2 had much less free recall for dialogue that students in Year 1.

Students in the non-segmenting condition who viewed the movie once in entirety and saw short clips occasionally were not able to remember any verbatim dialogue of either major or minor characters in the free recall condition.

Recall with video but no sound:

Year 1: Students were able to correctly call out a close copy of the exact dialogue for the six scenes that were shown initially, but the pattern was not what we expected. We selected a mix of scenes from familiar to less familiar dialogue: an example of familiar dialogue would be Scout saying, "What in the sam hell are you doing, Walter?" and less familiar dialogue would be "Oh, yes, I always get up at 4." (Deal). Students seemed to correctly identify as much of the less familiar as the familiar dialogue in the first six scenes, except for May Ella's words when she pointed out Tom as the man who raped her. I showed this clip to students three times, and the class knew what May Ella was generally saying but it wasn't until the third viewing that someone identified the words "right yonder."

Students also were unable to identify the words spoken in the last three scenes that I showed near the end of the class period: two of these scenes were familiar ("I did not, sir" Tom Robinson; and "We find the defendant guilty as charged" the jury foreman) and one was less familiar ("In the name of God, do your duty" Atticus). Again students seemed to know what was going on in the muted clip but they weren't coming up with the actual words. Some of the correct recall in the earlier scenes was also probably due to being able to read the character's lips as they spoke, but that was as possible when Tom Robinson said, "I did not, sir" as when Atticus said, "I'll take the case," but students correctly identified Atticus's line and not Tom Robinson's.

Year 2: Students in the segmenting condition seemed to know the gist of what Tom Robinson was saying in his testimony and what Mr. Cunningham said outside the jail one night. However, students were only able to correctly identify dialogue in three of the nine clips shown. They could recognize Scout saying "What in the sam hell are you doing?" which is a phrase students from both years remember easily. They were also close to recalling Deal saying "I always get up at 4," and May Ella identifying Tom Robinson in her testimony as sitting "right yonder." Students in the non-segmenting group had some recall of the scenes they were shown: for example, one student remembered that the confrontation between Atticus and Mr. Ewell in the courthouse came right after the scene with Mr. Cunningham and the hickory nuts. In five of the nine scenes shown, students in this group had a general idea of what was going on in the scene but not specifically what the character was saying. They did not remember any dialogue verbatim.

Recall with sound and no video:

Year 1: Students found this the easiest part of the recall, which we expected because the voice of the character would give a lot of cues as to who said the lines. Students were also able in most cases to immediately name the scene in which the lines were spoken. Again, we included a mix of familiar and less familiar dialogue. In one case, students were able to identify the scene from background sounds even before the dialogue started: for example, in the school yard scene where Scout says, "He made me start out on the wrong foot," (referring to Walter Cunningham), students knew which scene this was from the sounds of children playing.

Year 2: As with the first year, this recall test was the easiest and students in the segmenting condition were able to correctly identify all nine sound bites. When asked if they could identify the scene where Scout says Walter Cunningham got her started out on the wrong foot, they all correctly identified it as taking place in the school yard. Students in the non-segmenting condition did about as well, although they seemed to confuse the characters Mr. Ewell and Mr. Cunningham as well as Atticus and the Judge.

Discussion:

It is not surprising that students could identify characters and the scenes for video segments that were presented with sound only (no images). Certain information, such as the voice of a speaker, has been found to be

memorable during incidental learning. Geiselman and Bellezza (1976, 1977) found that subjects could distinguish which of two speakers said specific sentences about 70% of the time even though the task was simply to remember the sentences and not who said them (Geiselman & Crawley, 1983). Geiselman and Bellezza proposed a voice-connotation theory to explain this memory phenomenon: voice is remembered without intent because the connotation of the voice influences the meaning of what is said. They extended this theory with two additional experiments and found that memory for voice is more accurate when subjects are given a personal history of the speaker before the test and when the location of the speaker remains the same throughout the text. Students who worked with "To Kill a Mockingbird" would have personal histories for each character through the work on characterization that they did and would likely have noted the location of the speakers in the segmenting and naming activities.

A feature that is central to oral language--intonation--and one that is often shared by both oral and written language--repetition--could account for why certain pieces of dialogue were remembered. Badzinski suggests that vocal intonation signals message intensity and did several studies to determine if students (ages 5-10) based inferencing on such vocal cues. She found that while ". . .intensity influences how directly the information is implicated," (Badzinski, 1992, p. 29), it did not necessarily effect what inferences were made or improve memory for explicit ideas (Badzinski, 1991). Badzinski concludes that intonation conveys largely emotional information and might be more important in making relational or perceptual judgements; she also noted that as students get older, they become better able to detect and interpret discrepant nonverbal messages (Badzinski, 1991). Intonation might explain why students could remember such humorous pieces of dialogue as Scout's "What in the sam hell are you doing?" and Deal's "I'm five years old and I can read" as well as more the more dramatic voice of May Ella in "I've got one thing to say and then I ain't gonna say no more." Students were also quick to notice May Ella's discrepant nonverbal messages, such as the scene where she says, "I don't recollect if he hit me," and then changes her mind and accuses Tom Robinson of beating her.

Students also noticed repetition in two ways. First, they noticed when characters repeated a phrase from one part of the story to another. For example, students noticed that Mr. Ewell had used the phrase, "nigger lover," in two places in the movie and could identify both scenes; they

also noticed that both the sheriff and Mr. Ewell used the sentence, "She was mighty beat up," in their separate testimonies describing May Ella. The second way repetitive language may have influenced what dialogue students recalled was that two pieces of dialogue that students seemed to attend to both when they segmented the video and in the recall test used repetitive wording: "And he hit me and he hit me and he hit me" (May Ella) and "I ran to the fence and I ran around back and I ran. . . ." (Mr. Ewell).

Another reason why Mr. Ewell's dialogue about running was remembered might be related to the social construction that went into naming Mr. Ewell's testimony, "The Running Man." The transcript of the videotape from the day students from Year 1 named this scene shows names included "the left-handed man," "the man who couldn't read or write," and "the man who couldn't write in court," all of which referred to the way Atticus cleverly demonstrated that Mr. Ewell was left-handed, a fact that was later an important part of the defense. The teacher continued to ask for names and someone suggested "the man who runs all the time," which the teacher restated as "the running man." It won the class vote, although it was clear that the teacher wasn't sure it was a very good name. According to Bloome, a juxtaposition of texts is not sufficient to establish intertextuality, as it is more traditionally thought--for example when a child makes a comparison on one book to another. Bloome argues that a juxtaposition has to be ". . . proposed, be interactionally recognized, be acknowledged, and have social significance" to establish intertextuality (Bloome & Egan-Robertson, 1993, p. 308). In the naming of scenes, students proposed various titles, the teacher and other students would recognized and acknowledge (or not) potential names, and the class would vote which may have been the social significant act in the process.

Brandt asserts that the naming of something is ". . .to give it over to the grounds of the we." (Brandt, 1990, p. 73) Indexical expressions such as "Watergate" are an example, according to Brandt, of how a label can denote both a specific event and a shared understanding about the event. "The important fact about indexical expressions," writes Brandt, "is that they point to 'us,' to a relationship 'we' have by virtue of a common experience." (Brandt, 1990, p. 74) The names created in the segmenting process serve as indexical expressions, and occasionally those names have some relationship to dialogue used in the anchor.

The final point to make about factors that could have influenced student memory for dialogue in detail has to do with Tannen's ideas about involvement. Tannen argues that identification of an audience with a

character leads to involvement which in turn creates subjective knowing (being "moved") (Tannen, 1982). To explore this, it's interesting to compare what dialogue students remember from May Ella's testimony and what they remember of Atticus's closing arguments at the end of the trial. Not only did students remember several things that May Ella said, students in the segmenting condition both years easily remembered May Ella's outburst, "I got one thing to say and then I ain't gonna say no more."

It could be argued that students came to subjectively know May Ella through her testimony, which used more oral language features and appeal to emotional response. By contrast, Atticus's speech is an example of a message-oriented content (almost 8 minutes of video) presented via oral language (e.g. closing arguments to a jury) and perceived through listening. Atticus's speech is an example of objective knowing created by being convinced by an intellectual argument.

Conclusions:

This study is only a preliminary look at a possible connection between memory for verbatim dialogue and overall recall for an anchor. The recall test was administered in a whole class setting which might inhibit some students from displaying what they remembered. However, what started out as a question about memory for oral language detail may have some insights into using video for literacy instruction.

One such insight is that some stories are told more through the dialogue than the actions of the characters, and those stories may offer more opportunities to use listening comprehension to strengthen reading comprehension. It's possible that there is a bidirectional character to the interaction of oral language and written language (e.g. one supports the other and vice versa), and movies like "To Kill a Mockingbird" might be good vehicles for using oral language/listening/speaking to reinforce written language/reading/writing.

A second consideration is that in a video presentation of a story, the content may include both oral language devices that encourage subjective knowing and written language, message-oriented statements that appeal to objective knowing. To ensure that students remember the message content as well as the emotional content, it may be necessary to spend additional time and different activities around becoming expert in this text.

Finally, there is a social dynamic involved in becoming expert in an anchor, particularly in naming the storyboard segments and in privileging what things from the video get noticed and discussed by the class. It might be interesting to trace this dynamic more specifically over the course of the viewing, segmenting, and character presentations that the class did with "To Kill a Mockingbird."

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